

CLAIM AMENDMENTS

Please cancel claim 5 and add new claims 10 to 18 which are as follows:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Currently Amended) A method of using enhancing the effect of the lysophospholipid on a cell, comprising:
introducing a gene that encodes G protein-coupled protein p2y9 comprising into the cell;
and assaying a lysophospholipid activated response of the cell, selected from the group
consisting of stimulation of cell proliferation, recovery of damaged tissue, retraction of
neurite essential to the maturation of neuron, smooth muscle contraction, platelet
aggregation, suppression of cell apoptosis and promotion of cellular chemotaxis, wherein the
p2y2 protein comprises an amino acid sequence substantially represented by that is more
than 95% homologous with SEQ ID NO:1 as a lysophosphatidic acid (LPA) receptor.
5. (Cancelled)
6. (Currently Amended) -The method of using according to any one of claims claim 4 or 5,
wherein p2y9 has -the amino acids acid sequence of SEQ ID NO:1 in the sequence listing.
7. (Currently Amended) -A method for of screening a test compound which regulate for
activating a physiological activities stimulated or inhibited response affected by
lysophosphatidic acid (LPA) by using lysophosphatidic acid (LPA) receptor comprising G
protein coupled protein p2y9 the method of claim 4, further comprising the step of adding

the test compound.

8. (Original) The method according to claim 7, wherein the method is to screen the antagonist in use for carcinoma cell invasion.
9. (Cancelled)
10. (New) A method of enhancing the effect of lysophospholipid on a cell, comprising:
introducing a gene that encodes G protein-coupled protein p2y9 into the cell; and
assaying a lysophospholipid activated response of the cell, the response selected from the group consisting of: stimulation of cell proliferation, recovery of damaged tissue, retraction of neurite essential to the maturation of neuron, smooth muscle contraction, platelet aggregation, suppression of cell apoptosis and promotion of cellular chemotaxis.
11. (New) The method of claim 10, wherein the step of assaying the response comprises adding a lysophospholipid to the cell's medium.
12. (New) The method of claim 11, wherein the lysophospholipid is 1-acyl-LPA.
13. (New) The method of claim 10, wherein the p2y2 protein comprises an amino acid sequence represented by SEQ ID NO:1 or an allelic variant thereof.
14. (New) A method of assaying lysophospholipid in a sample, comprising measuring the response of G protein-coupled protein p2y9 according to the method of claim 10, and comparing said response with that obtained from a known lysophospholipid quantity.
15. (New) A method of detecting ovarian cancer by detecting LPA in plasma using G protein-coupled protein p2y9 that comprises an amino acid sequence having a sequence identity of

at least 95 % with the amino acid sequence of SEQ ID NO:1 and wherein the p2y9 protein has LPA receptor activity.

16. (New) A method of determining the level of LPA in a sample, comprising measuring the response of G protein-coupled protein p2y9s expressed on the cell surface to LPA, wherein the p2y9 protein comprises a sequence with at least a 95% sequence identity with SEQ ID NO:1 and the protein has LPA receptor activity.
17. (New) A method of screening substances in test samples that enhance or inhibit LPA dependent LPA activity, comprising monitoring binding of the test samples to G protein-coupled protein p2y9, wherein the p2y9 protein comprises an amino acid sequence having a sequence identity of more than 95 % to the amino acid sequence of SEQ ID NO:1.
18. (New) The method of claim 17, wherein the substances are inhibitors of LPA dependent LPA activity and are further screened for effects on carcinoma cell invasion.